

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,297	07/08/2003	Kevin Bradley Akins	01473.401400	7394
5514	7590 09/19/2005		EXAMINER	
	ICK CELLA HARPE ELLER PLAZA	PRONE, JASON D		
NEW YORK, NY 10112		ART UNIT	PAPER NUMBER	
	•		3724	

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

			4 64			
		Application No.	Applicant(s)			
		10/614,297	AKINS ET AL.			
Office Action Summary		Examiner	Art Unit			
		Jason Prone	3724			
	The MAILING DATE of this communication	appears on the cover sheet w	vith the correspondence address			
Period for	,					
WHIC - Exte afte - If NC - Failt Any	ORTENED STATUTORY PERIOD FOR RECHEVER IS LONGER, FROM THE MAILING ensions of time may be available under the provisions of 37 CFI SIX (6) MONTHS from the mailing date of this communication of period for reply is specified above, the maximum statutory perior to reply within the set or extended period for reply will, by streply received by the Office later than three months after the material part of the provision of the provisio	DATE OF THIS COMMUNI R 1.136(a). In no event, however, may a riod will apply and will expire SIX (6) MOI tatute, cause the application to become A	ICATION. reply be timely filed NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).			
Status						
111	Responsive to communication(s) filed on 1	2 July 2005				
,—	•	This action is non-final.	•			
/	Since this application is in condition for allo		ters, prosecution as to the merits is			
٠,٠	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dii4						
•	ion of Claims					
4)⊠	Claim(s) <u>1-33</u> is/are pending in the application					
E.C.	4a) Of the above claim(s) <u>19-33</u> is/are witho	drawn from consideration.				
·	Claim(s) is/are allowed.					
	Claim(s) <u>1,2,4-7 and 12-16</u> is/are rejected.					
•	Claim(s) 3,8-11,17 and 18 is/are objected to. Claim(s) are subject to restriction and/or election requirement.					
اـــا(٥	ciain(s) are subject to restriction ar	id/or election requirement.				
Applicat	ion Papers					
9)🖾	The specification is objected to by the Exam	niner.				
10)⊠	The drawing(s) filed on <u>08 July 2003</u> is/are:	a) accepted or b) ⊠object	cted to by the Examiner.			
	Applicant may not request that any objection to	the drawing(s) be held in abeya	nce. See 37 CFR 1.85(a).			
	Replacement drawing sheet(s) including the con	rrection is required if the drawing	g(s) is objected to. See 37 CFR 1.121(d).			
11)	The oath or declaration is objected to by the	Examiner. Note the attache	d Office Action or form PTO-152.			
Priority :	under 35 U.S.C. § 119					
12)[Acknowledgment is made of a claim for fore	eign priority under 35 U.S.C.	§ 119(a)-(d) or (f).			
a)	☐ All b)☐ Some * c)☐ None of:					
	1. Certified copies of the priority docum					
	2. Certified copies of the priority docum					
	3. Copies of the certified copies of the p		received in this National Stage			
	application from the International Bu	•				
* (See the attached detailed Office action for a	list of the certified copies not	received.			
	•					

U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05)

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date 7/8/03.

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)

Attachment(s)

4) Interview Summary (PTO-413)

6) Other: _____.

Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application (PTO-152)

Art Unit: 3724

DETAILED ACTION

Information Disclosure Statement

1. The I.D.S. filed 08 July 2003 has been considered, however, the second item in the "Other Documents" section (Urschel, "How to Cut Dairy Food Products", Urschel Laboratories, Inc., October, 2002; pp. 1-6) had not been submitted and, therefore, was not considered.

Election/Restrictions

- 2. Applicant's election without traverse of Group I in the reply filed on 12 July 2005 is acknowledged.
- 3. Claims 19-33 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 12 July 2005.

In regards to the argument of the separation of claims 19-31 (group II) and claims 32 and 33 (group III), the argument is persuasive and claims 19-33 would be examined together if they had been elected. Group I was elected without traverse over groups II and III, so the previous argument is not relevant to the instant application.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: In Figure 2, item "226". In Figure 3, item "606". Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are

Art Unit: 3724

required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to because In Figure 4, the lower occurrence of item "234" should be replaced with "232". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filling date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

Art Unit: 3724

corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

6. The disclosure is objected to because of the following informalities: On line 1 of paragraph [0042], the phrase "chopping assembly 426" should be replaced with "chopping assembly shroud 426".

On line 10 of paragraph [0047], the phrase "chopping recess 618" should be replaced with "chopping recess 616"

On lines 16-26 of paragraph [0048], the phrases "a first pair of circular blades 202...spaced apart a first distance d1 apart", "a second pair of circular blades 202...spaced apart a second distance d2 apart", "a third pair of circular blades 202...spaced apart a third distance d3 apart", and "a fourth pair of circular blades 202...spaced apart a fourth distance d4 apart" are not correct. For example the first phrase says that the first blade are spaced a distance d1 apart, however, Figure 5 discloses that the first blades are actually spaced apart a distance equal to twice the distance of d1. The following goes for each of the 4 distances d1-d4.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

⁽b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3724

8. Claims 1, 2, 4, 5, 7, 12, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Allen (95,406) (see page 11 of this Office action for examiner added reference numerals for clarity).

In regards to claim 1, Allen discloses the same invention including a conveyor assembly that conveys the product in a feed direction and defines a conveyance surface (C and K), a slitter assembly positioned relative to and coupled to the conveyor assembly (1a-g), the slitter assembly includes a plurality of cutting elements (1a-g) arranged in a V shape as viewed in a direction substantially normal to the conveyance surface (Fig. 2), and the cutting elements overlap one another in the feed direction (Fig. 1).

In regards to claims 2 and 4, Allen discloses an opening of the V shape is oriented in a leading direction (2) and the pointed end of the V shape is oriented in a trailing direction (3) such that the product will be fed to the slitter from the open end of the V shape by the conveyor (K), and the plurality of cutting elements comprise a circular blade (1a-g).

In regards to claim 5, Allen discloses the slitter assembly further comprises a drive means for driving the circular blades (E) such that the tangential velocity of the blades is substantially greater than the velocity at which the product is conveyed (inherent).

In regards to claim 7, Allen discloses a slitter frame (A) a slitter arm coupled to the slitter frame (B), a leading slitter shaft (4a) and a trailing slitter shaft (4d) both rotatably supported by the slitter frame (Fig. 1), at least one intermediate slitter shaft (4f)

Art Unit: 3724

rotatably supported by the slitter arm (Fig. 2), each of the slitter shafts extend transversely to the feed direction (4a-g), and at least one of the blades is rotatably supported on each of the slitter shafts (1a-g and 4a-g).

In regards to claim 12, Allen discloses the plurality of circular blades comprises a first pair of coaxial circular blades spaced apart in a direction transverse to the feed direction by a first distance (1a and 1e) and a second pair of coaxial circular blades spaced apart in a direction transverse to the feed direction by a second distance, less than the first distance and offset in the feed direction from the first pair (1b and 1f).

In regards to claim 13, Allen discloses a third pair of coaxial circular blades spaced apart in a direction transverse to the feed direction by a third distance, less than the second distance and offset in the feed direction from the second pair (1c and 1g).

Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Allen in view of Thrasher (3,645,304). Allen discloses the invention but fails to disclose a peeler foot disposed above the conveyance surface which biases the product toward the conveyance surface and prevent the product from adhering to and riding-up the sides of the circular blades. Thrasher teaches a peeler foot disposed above the conveyance surface which biases the product toward the conveyance surface and prevent the

Art Unit: 3724

product from adhering to and riding-up the sides of the circular blades (16). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Allen with a peeler foot, as taught by Thrasher, to keep the work piece flat against the conveyer to allow for a straight cut.

- 11. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Allen in view of Hurdle, Jr. (6,772,665). Allen discloses the invention but fails a chopping assembly positioned downstream of the slitter assembly to sever the strip of products transversely to the feed direction. Hurdle, Jr. teaches that it is old and well known to provide a chopping assembly positioned downstream of the slitter assembly to sever the strip of products transversely to the feed direction (28). Hurdle, Jr. discloses a piece of wood being transversely cut into a smaller piece (26) and it is old and well known that the piece of wood does not start off as the rectangle shown in Figure 1. That being said, it is clear that the work piece must have been slit before or upstream of the chopper. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Allen with a chopping assembly, as taught by Hurdle, Jr., to cut the work piece transversely to create a more manageable piece.
- 12. Claims 1 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberson et al. (3,779,117) in view of Allen. In regards to claim 1, Roberson et al. discloses the invention including a conveyor assembly that conveys the product in a feed direction and defines a conveyance surface (5), a slitter assembly positioned relative to and coupled to the conveyor assembly (2, 4, 6, 8, and in Fig. 2 the far left center slitter), and the slitter assembly includes a plurality of cutting elements (2, 4, 6, 8,

Art Unit: 3724

and center slitter) arranged in a V shape as viewed in a direction substantially normal to the conveyance surface (Fig. 2).

In regards to claim 12, Roberson et al. discloses the plurality of circular blades comprises a first pair of coaxial circular blades spaced apart in a direction transverse to the feed direction by a first distance (8) and a second pair of coaxial circular blades spaced apart in a direction transverse to the feed direction by a second distance, less than the first distance and offset in the feed direction from the first pair (6).

In regards to claim 13, Roberson et al. discloses a third pair of coaxial circular blades spaced apart in a direction transverse to the feed direction by a third distance, less than the second distance and offset in the feed direction from the second pair (4).

In regards to claim 14, Roberson et al. discloses a fourth pair of coaxial circular blades spaced apart in a direction transverse to the feed direction by a fourth distance, less than the third distance and offset in the feed direction from the third pair (2).

In regards to claim 15, Roberson et al. discloses the plurality of circular saw blades comprises a central circular blade positioned such that a plane defined by the cental circular blade intersects the midpoint of the first, second, third, and fourth distances and if offset in the feed direction from the fourth pair of circular blades (Fig. 2 far left center blade).

However, Roberson et al. fail to disclose the cutting elements overlap one another in the feed direction. Allen teaches that it is old and well known for blades in a V shape to overlap (Fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Roberson et al. with

Art Unit: 3724

overlapping blades, as taught by Allen, to reduce to overall length of the cutting apparatus.

Allowable Subject Matter

13. Claims 3, 8 (along with dependant claims 9-11), and 17 (with dependant 18) are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 3 discloses the limitation of a belt support frame with recesses that receive the belt when the above mounted blade depress the belt by cutting all the way through the work piece. Claim 8 discloses the limitation of a pivotal slitter arm to raise the intermediate slitter shaft. Claim 17 discloses the limitation of a chopper with an elliptical cutting motion to that has a downward severing motion and a feedward pushing direction.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Murray, Sturm, Reichstein, Van Berkel, Buroff, Hearden et al., Oleson, Van Erden et al., and Bleick.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Prone whose telephone number is (571) 272-4513. The examiner can normally be reached on 7:30-5:00, Mon - (every other) Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on (571) 272-4514. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3724

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 15, 2005

Patent Examiner Jason Prone

Art Unit 3724

T.C. 3700

Art Unit: 3724

